



CASE STUDY.

GEN3SYS®

Medium Carbide Steel Military

PROJECT PROFILE:

The End-user is manufacturing products for land, naval, and aerospace military defense. The customer is machining medium carbon steel bullets using a Wickman multiple-spindle machine running with oil flood coolant.

+ CHALLENGE:

Previously the customer was using a WNT solid carbide drill running at the following parameters: 900 RPM, 163 SFM, 0.0063 IPR, and 5.67 IPM. The tool drilled a 1.575" (40 mm) deep hole with a 0.6889" (17.5 mm) diameter. The tool had a cycle time of 16 seconds and a life of 700 holes. Unsatisfied with their current production process, the customer wanted to increase tool life and lower their cost of production.

+ OUR SOLUTION:

AMEC recommended the GEN3SYS® High Penetration Drilling System using insert item #5C117H-17.5 and holder #6D517S-2DFM running at the suggested parameters of 900 RPM, 163 SFM, 0.0063 IPR, and 5.67 IPM. The tool had a cycle time of 16 seconds. The results met the customer's expectations. The GEN3SYS® tool dramatically increased the tool life to 2500 holes and therefore lowered the customer's cost of production.

+ PROJECT DATA:

Thanks to the successful performance of the GEN3SYS® tooling the customer plans to order additional sizes of the tool for use in other applications.



*EXTENDED
TOOL LIFE*